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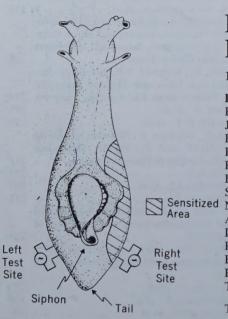
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To understand how information is processed and stored by the nervous system, and in particular the human brain, has been a major challenge in science for centuries and will remain so for some time to come.

Not until recently did neurobiologists agree to seek plasticity of behavior primarily in the modulation of the properties of synapses between nerve cells. This must be understood within the context provided by a neural circuitry. Learning has become a topic of molecular biology. Three systems appear particularly promising for this approach:

Drosophila, the marine snails Aplysia and Hermissenda, and the mammalian hippocampal tissue.

